

ATTORNEY DOCKET NO.
062891.1142
Confirmation No.: 7140

PATENT APPLICATION
10/645,139

1

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
ON APPEAL FROM THE EXAMINER TO THE BOARD
OF PATENT APPEALS AND INTERFERENCES**

In re Application of: Mark (nmi) Albert et al.
Serial No.: 10/645,139
Filing Date: August 21, 2003
Group Art Unit: 3639
Examiner: Akiba K. Robinson Boyce
Title: *System and Method for Managing Access for an End User in
a Network Environment*

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

APPEAL BRIEF

Appellant has appealed to the Board of Patent Appeals and Interferences from the decision of the Examiner mailed March 22, 2006, finally rejecting Claims 1-31, all of which are pending in this case. Appellant filed a Notice of Appeal on July 17, 2006. The Commissioner is hereby authorized to charge the statutory fee of \$500.00 to Deposit Account No. 02-0384 of Baker Botts L.L.P.

ATTORNEY DOCKET NO.
062891.1142
Confirmation No.: 7140

PATENT APPLICATION
10/645,139

Table of Contents

<u>Real Party In Interest</u>	3
<u>Related Appeals and Interferences</u>	4
<u>Status of Claims</u>	5
<u>Status of Amendments</u>	6
<u>Summary of Claimed Subject Matter</u>	7
<u>Grounds of Rejection to be Reviewed on Appeal</u>	8
<u>Argument</u>	9
<u>Conclusion</u>	15
<u>Appendix A: Claims on Appeal</u>	16
<u>Appendix B: Evidence</u>	22
<u>Appendix C: Related Proceedings</u>	23

ATTORNEY DOCKET NO.
062891.1142
Confirmation No.: 7140

PATENT APPLICATION
10/645,139

3

Real Party In Interest

This application is currently owned by Cisco Technology, Inc., as indicated by an assignment recorded on August 21, 2003, in the Assignment Records of the United States Patent and Trademark Office at Reel 014424, Frame 0385.

ATTORNEY DOCKET NO.
062891.1142
Confirmation No.: 7140

PATENT APPLICATION
10/645,139

Related Appeals and Interferences

There are no known appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision regarding this appeal.

ATTORNEY DOCKET NO.
062891.1142
Confirmation No.: 7140

PATENT APPLICATION
10/645,139

Status of Claims

Claims 1-31 are pending in this application. Claims 1-5, 7-13, 15-19, 21-25, and 27 are rejected pursuant to a Final Office Action mailed May 2, 2006, and are all presented for appeal. All pending claims are shown in Appendix A.

ATTORNEY DOCKET NO.
062891.1142
Confirmation No.: 7140

PATENT APPLICATION
10/645,139

Status of Amendments

All amendments submitted by Appellant were entered by the Examiner before the issuance of the Final Office Action mailed May 2, 2006.

Summary of Claimed Subject Matter

FIGURE 1 is a simplified block diagram of a communication system 10 for managing network access and it includes an end user 12, and a Content Services Gateway (CSG) 14, which may include a loggen element 24, and a known user table (KUT) 26. Communication system 10 also includes a quota manager element 36 and a billing system element 40 that may include a quota server 42 and a billing mediation agent (BMA) 44. Billing system element 40 may also include a price server 50 and an advice of charge server 60.

The present invention operates in the following manner: CSG 14 parses IP packets transmitted between a user (client) and a server. For selected flows and for selected clients, billing system element 40 debits a user account based on the type and quantity of information being transmitted. In a general sense, CSG 14 may cooperate with billing system element 40 in order to charge end user 12 based on a particular event, content, or communication flow.

Quota manager element 36 operates in conjunction with price server 50 and advice of charge server 60 to provide granular content pricing. End user 12 may be notified how much his account will be charged for the selected content. Associated operations may include a proverbial 'price check' being provided to end user 12 before end user 12 commits to a financial obligation. Other operations may include price confirmations that are displayed to end user 12. These features could potentially ensure that end user 12 understand and accepts the obligations being tendered.

The design of communication system 10 provides a mechanism for quota server 42 to specify pricing of the content, or the end-user to choose to accept the charges for the content about to be received. The architecture of communication system 10 is used to execute per-click authorization in enabling one or more of the following functions: 1) price server 50 is leveraged to enable quota server 42 to provide granular content pricing, i.e. more granular than at the CSG service level; 2) advice of charge server 60 may be used to perform a network address translation (NAT) or an HTTP redirect of the user session to a server to query end user 12 to verify the charge before serving the content; 3) L3/L4/L7 filtering may be performed; and 4) quota management offload may be executed in allowing quota server 42 to micromanage user quota for each request.

ATTORNEY DOCKET NO.
062891.1142
Confirmation No.: 7140

PATENT APPLICATION
10/645,139

Grounds of Rejection to be Reviewed on Appeal

Appellant requests that the Board review the Examiner's rejection of 1-6, 8, and 10-27 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,505,174 issued to Keiser et al. (hereinafter "*Keiser*"). The Examiner rejects Claims 7 and 9 under 35 U.S.C. §103(a) as being unpatentable over *Keiser*.

Argument

The Examiner's rejections of the pending claims is improper, and the Board should withdraw the rejections for the reasons given below.

Section 102 Rejection

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.¹ In addition, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claims" and "[t]he elements must be arranged as required by the claim."² In regard to inherency of a reference, "[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic."³ Thus, in relying upon the theory of inherency, an Examiner must provide a basis in fact and/or technical reasoning to support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.⁴

Using the preceding well-settled jurisprudence, it is clear that *Keiser* fails to anticipate Independent Claim 1 for a multitude of reasons. First, the Examiner has incorrectly combined several different embodiments of *Keiser* in an effort to teach various integrated aspects of the presently claimed subject matter. The Examiner should understand that the theme of Independent Claim 1 is data access.

Ostensibly, the Examiner is using the (pay-per-view) market research tool of *Keiser* to teach such data access. However, when the Examiner cites Column 24, lines 43-46 for the verification aspect of the present invention, he has departed from that market research tool. Indeed, *that* verification is not a verification at all. The price generation in that recited passage is simply for historical prices of securities and indexes. In contrast to this random

¹ *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987); MPEP §2131.

² *Richardson v. Suzuki Motor Co.*, 9 USPQ 2d 1913, 1920 (Fed. Cir. 1989); *In re Bond*, 15 USPQ 2d 1566 (Fed. Cir. 1990); MPEP §2131 (*emphasis added*).

³ MPEP §2112 (citing *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ 2d 1955, 1957 (Fed. Cir. 1993) (*emphasis in original*)).

⁴ MPEP §2112 (citing *Ex Parte Levy*, 17 USPQ 2d 1461, 1464 (Bd. Pat. at App. and Inter. 1990) (*emphasis in original*)).

pricing information, Independent Claim 1 recites a **pricing parameter relating to the data segment to be accessed by the end user.**

The Examiner has similarly misapplied *Keiser* in the context of quota. Independent Claim 1 recites a content services gateway coupled to the billing system element and operable to communicate with the billing system element in order to manage distribution of quota provided to the end user, wherein the quota reflects a currency **for the end user to apply in accessing the data segment.** So the currency (or quota) relates to access of the data segment: not ownership of the underlying asset. This is clearly circumscribed by Independent Claim 1, yet it is not found anywhere in *Keiser*. At Column 23, lines 63-67, the Examiner has relied on the triggering of stop loss orders as evidence of this function. But again, the distinction here is ownership of a stock versus the privilege or right to access certain information. When an end user elects to access certain network information on a pay-per-view basis, he is paying for the right to view that data (e.g. an article of on www.espn.com, a picture from a local event, a publication from the Wall Street Journal online, etc.). The end user does not own ESPN merely because he has paid for access to a data segment. The Board should appreciate that when there is sufficient quota, the billing system element manages the quota by *applying* it such that the data segment can be *accessed*. This again is outlined by Independent Claim 1, but it is not found in *Keiser*.

As a corollary, *Keiser* fails to disclose any architecture in which there is a “content services gateway coupled to the billing system element and operable to communicate with the billing system element in order to *manage distribution of quota provided to the end user, wherein the quota reflects a currency for the end user to apply in accessing the data segment*” as is recited by the pending subject matter.

The Examiner again mistakenly relies on *Keiser* for disclosure of this function. In particular, the Examiner has cited cash account balances, which in the architecture of *Keiser* are used to purchase securities in an open market exchange, for the recitation of quota management. More specifically, the Examiner has cited one function of *Keiser* in providing stop-loss orders (which are instructions on when to sell a security based on its fluctuating price), as being relevant to the quota distribution feature of the pending subject matter. Clearly, this teaching is not akin to quota that reflects a currency for the end user to apply in

accessing the data segment. For example, there is no recitation in *Keiser* for the cash balances being applied for the privilege of accessing a data segment. Repeatedly, *Keiser* discloses that the balances are only applied to take financial positions in marketable securities. Indeed, *Keiser* is not even tangentially relevant to such quota management operations, nor could it handle such activities. So disparate are the teachings of *Keiser* that there is a good faith argument here that *Keiser* is not even analogous art: much less a viable §102 reference. Because *Keiser* fails to disclose such a quota management protocol, Independent Claim 1 is patentable over this reference.

Section 103 Rejection

The Examiner rejects Claims 7 and 9 under 35 U.S.C. §103(a) as being unpatentable over *Keiser*. Applicant respectfully traverses this rejection for the following reasons.

Applicant respectfully reminds the Examiner that to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation; either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Third, the prior reference (or references when combined) must teach or suggest all of the claim limitations.⁵ It is respectfully submitted that these rejected Claims are patentable over the art of record based on at least the third criterion of obviousness: none of the references alone or in combination teach, suggest, or disclose each and every claim limitation. This prong of §103 has been evaluated extensively in the analysis provided above. Thus, because of the deficiencies of *Keiser*, the Examiner has clearly failed to meet his burden imposed by the third criterion of obviousness.

Setting aside the issue of *Keiser* even qualifying as analogous art, Applicant also wishes to note that even if these elements of Independent Claim 1 were disclosed in the cited reference, which they are not, the proposed *Keiser* reference is still improper because the Examiner has not shown the required suggestion or motivation in *Keiser* or in the knowledge

⁵ See M.P.E.P. §2142-43.

generally available to one of ordinary skill in the art at the time of the invention to combine these references. The mere fact that references *can* be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.⁶ Thus, the mere fact that the teachings of one reference would improve the teachings of another reference, as the Examiner asserts, does not provide the required suggestion to combine. The U.S. Court of Appeals for the Federal Circuit has held that the fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggests the desirability of the modification.⁷ Nothing in *Keiser* suggests or motivates the proposed combination, nor has the Examiner provided evidence that suggests or motivates the proposed combination.⁸ Speculation in hindsight that “it would have been obvious” to make the proposed combination because the proposed combination would be helpful is insufficient under the M.P.E.P.⁹ and governing Federal Circuit case law.¹⁰ The M.P.E.P. also confirms that this approach is improper and, thus, it should not be used here.¹¹

⁶ M.P.E.P. § 2143.01 (emphasis in original).

⁷ *In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992).

⁸ If “common knowledge” or “well known” art is being relied on to combine the references, Applicants respectfully request that a reference be provided in support of this position pursuant to M.P.E.P. § 2144.03. If personal knowledge is being relied on to supply the required motivation or suggestion to combine, Applicants respectfully request that an affidavit supporting such facts be provided pursuant to M.P.E.P. § 2144.03.

⁹ See M.P.E.P. § 2145 X.C. (“The Federal Circuit has produced a number of decisions overturning obviousness rejections due to a lack of suggestion in the prior art of the desirability of combining references.”).

¹⁰ For example, in *In re Dembiczak*, 175 F.3d 994 (Fed. Cir. 1999), the Federal Circuit reversed a finding of obviousness by the Board of Patent Appeals and Interferences, explaining that evidence of a suggestion, teaching, or motivation to combine is essential to avoid impermissible hindsight reconstruction of an applicant’s invention:

Our case law makes clear that the best defense against the subtle but powerful attraction of hindsight obviousness analysis is *rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references*. Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor’s disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight.

175 F.3d at 999 (quoting *W.L. Gore & Assoc., Inv. v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983)) (emphasis added) (citations omitted). See also *In Re Jones*, 958 F.2d 347 (“Conspicuously missing from this record is any evidence, other than the PTO’s speculation (if that can be called evidence) that one of ordinary skill in the herbicidal art would have been motivated to make the modification of the prior art salts necessary to arrive at [the claimed invention].”).

¹¹ See M.P.E.P. §2145.

Thus, obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination.¹² The factual inquiry whether to combine references must be thorough and searching.¹³ This factual question cannot be resolved on subjective belief and unknown authority;¹⁴ it must be based on objective evidence of record.¹⁵

Furthermore, the Examiner is precluded from modifying the teachings of *Keiser* in an effort to teach the limitations of the pending claims because there is no indication in any of the references as to the desirability of making such modifications. The cited references must disclose the desirability of making the proposed modification.¹⁶ The fact that the modification is possible or even advantageous is not enough.¹⁷ A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention.¹⁸

With respect to the second criterion of non-obviousness, the Examiner has also failed to show a reasonable expectation of success for the proposed combinations. *Keiser* would not be capable of performing the operations required by the claimed invention, as *Keiser* cannot accommodate quote distribution as outlined by the Independent Claims. The proposed combination (presumptively) attempts to combine divergent subject matter that has not been shown to be capable of operating according to any degree of predictability. The Examiner, without resorting to improper hindsight to look through the claimed invention, has not addressed the chance that the proposed combination would have any success whatsoever: let alone a reasonable expectation of success as is required. Therefore, Applicant respectfully submits that the Examiner has failed to establish the second criteria for a prima facie case of obviousness.

¹² See *Carella v. Starlight Archery and Pro Line Co.*, 804 F.2d 135, 140, 231 USPQ 644, 647 (Fed. Cir. 1986).

¹³ See *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52, 60 USPQ 2d 1001, 1008 (Fed. Cir. 2001).

¹⁴ See *In re Lee*, 277 F.3d 1338, 1343-44, 61 USPQ 2d 1430, 1434 (Fed. Cir. 2002).

¹⁵ *Id.* at 1343, 61 USPQ 2d at 1434.

¹⁶ *In re Mills*, 916 F.2d 680, 682 (Fed. Cir. 1990).

¹⁷ See *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984).

¹⁸ *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). (See also M.P.E.P. §2141.02).

Assuming, for the sake of argument, that there is the required suggestion or motivation to combine the *Keiser* reference with additional features, the proposed combination would fail because the limitations specifically recited in the pending claims are not disclosed in each of the references, as evaluated extensively above. Accordingly, such an argument is flawed in that it does not satisfy the third criterion of obviousness, as identified in the analysis above.

Independent Claims 10, 16, 22 recite limitations similar, but not identical, to those recited in Independent Claim 1. Therefore, these claims are also allowable, for example, for the same reasons as identified above. Additionally, the corresponding dependent claims from these Independent Claims are also patentably distinct for analogous reasons.

Accordingly, all of the pending claims have been shown to be allowable as they are patentable over the references of record. Notice to this effect is respectfully requested in the form of a full allowance of these claims.

ATTORNEY DOCKET NO.
062891.1142
Confirmation No.: 7140

PATENT APPLICATION
10/645,139

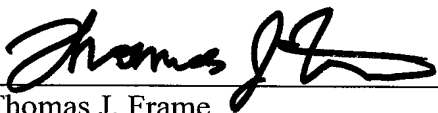
16

Conclusion

Appellant has demonstrated that the present invention, as claimed, is clearly distinguishable over the prior art cited by the Examiner. Therefore, Appellant respectfully requests the Board of Patent Appeals and Interferences to reverse the final rejection of the Examiner and instruct the Examiner to issue a notice of allowance of all claims.

The Commissioner is hereby authorized to charge the statutory fee of \$500.00 to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,
BAKER BOTTS L.L.P.
Attorneys for Applicant



Thomas J. Frame
Reg. No. 47,232

Date: October 17, 2006

Customer No. **05073**

Appendix A: Claims on Appeal

1. (Previously Presented) An apparatus for managing network access, comprising:

a billing system element operable to receive one or more packets of a communication flow and to communicate with a price server, wherein the price server is operable to receive a query from the billing system element associated with a pricing parameter relating to a data segment to be accessed by an end user associated with the communication flow, and wherein the price server is operable to return a response to the billing system element that includes the pricing parameter relating to the data segment such that the end user can verify the pricing parameter before accessing the data segment; and

a content services gateway coupled to the billing system element and operable to communicate with the billing system element in order to manage distribution of quota provided to the end user, wherein the quota reflects a currency for the end user to apply in accessing the data segment.

2. (Original) The apparatus of Claim 1, wherein the price server is further operable to provide a selected one of a drop and a forward action, the forward action resulting in the end user being permitted access to the data segment, and wherein the drop action restricts the end user such that he cannot access the data segment.

3. (Original) The apparatus of Claim 1, wherein the price server is further operable to provide a quota allocation to the end user on a per-flow basis such that the end user is given an amount of quota that may substantially satisfy a current access request being made by the end user.

4. (Original) The apparatus of Claim 1, wherein the billing system element is further operable to communicate with an advice of charge server, the advice of charge server operable to receive a query from the billing system element and to redirect a communication flow associated with the end user to a webpage that is operable to display one or more financial parameters associated with the data segment to the end user.

5. (Original) The apparatus of Claim 4, wherein the webpage includes a decision block that allows the end user to select whether he would like to proceed to access the data segment based on one or more of the financial parameters.

6. (Canceled)

7. (Previously Presented) The apparatus of Claim 1, wherein the Content Services Gateway includes a known user table (KUT) operable to store an internet protocol (IP) address associated with the end user, the KUT being further operable to store information associated with first and second network nodes being used by the end user.

8. (Previously Presented) The apparatus of Claim 1, wherein the billing system element further comprises a quota server operable to store quota data for the end user that reflects an allotment of information to be provided to the end user, the quota server being operable to be updated in accordance with direction provided by the Content Services Gateway.

9. (Previously Presented) The apparatus of Claim 1, wherein the Content Services Gateway further comprises a quota manager element operable to receive identifiers associated with first and second network nodes and to notify the billing system element of a change from the first network node to the second network node.

10. (Previously Presented) A method for managing network access, comprising:
receiving a query associated with a pricing parameter relating to a data segment to be accessed by an end user associated with a communication flow;
returning a response to the query that includes the pricing parameter relating to the data segment such that the end user can verify the pricing parameter before accessing the data segment; and
managing distribution of quota provided to the end user based on information being provided and associated with the pricing parameter, wherein the quota reflects a currency for the end user to apply in accessing the data segment.

11. (Original) The method of Claim 10, further comprising:
providing a selected one of a drop and a forward action in response to receiving the communication flow, the forward action resulting in the end user being permitted access to the data segment, wherein the drop action restricts the end user such that he cannot access the data segment.

12. (Original) The method of Claim 10, further comprising:
providing a quota allocation to the end user on a per-flow basis such that the end user is given an amount of quota that may substantially satisfy a current access request being made by the end user.

13. (Original) The method of Claim 10, further comprising:
redirecting the communication flow associated with the end user to a webpage that is operable to display one or more financial parameters associated with the data segment to the end user.

14. (Canceled)

15. (Original) The method of Claim 13, further comprising:
storing quota data for the end user that reflects an allotment of information to be provided to the end user.

16. (Previously Presented) A system for managing network access, comprising:
means for receiving a query associated with a pricing parameter relating to a data segment to be accessed by an end user associated with a communication flow;
means for returning a response to the query that includes the pricing parameter relating to the data segment such that the end user can verify the pricing parameter before accessing the data segment; and
managing distribution of quota provided to the end user based on information being provided and associated with the pricing parameter, wherein the quota reflects a currency for the end user to apply in accessing the data segment.

17. (Original) The system of Claim 16, further comprising:
means for providing a selected one of a drop and a forward action in response to receiving the communication flow, the forward action resulting in the end user being permitted access to the data segment, wherein the drop action restricts the end user such that he cannot access the data segment.

18. (Original) The system of Claim 16, further comprising:
means for providing a quota allocation to the end user on a per-flow basis such that the end user is given an amount of quota that may substantially satisfy a current access request being made by the end user.

19. (Original) The system of Claim 16, further comprising:
means for redirecting the communication flow associated with the end user to a webpage that is operable to display one or more financial parameters associated with the data segment to the end user.

20. (Canceled)

21. (Original) The system of Claim 19, further comprising:
means for storing quota data for the end user that reflects an allotment of information to be provided to the end user.

22. (Previously Presented) Software for managing network access, the software being embodied in a computer readable medium and comprising computer code such that when executed is operable to:

receive a query associated with a pricing parameter relating to a data segment to be accessed by an end user associated with a communication flow;

return a response to the query that includes the pricing parameter relating to the data segment such that the end user can verify the pricing parameter before accessing the data segment; and

managing distribution of quota provided to the end user based on information being provided and associated with the pricing parameter, wherein the quota reflects a currency for the end user to apply in accessing the data segment.

23. (Original) The medium of Claim 22, wherein the code is further is operable to:

provide a selected one of a drop and a forward action in response to receiving the communication flow, the forward action resulting in the end user being permitted access to the data segment, wherein the drop action restricts the end user such that he cannot access the data segment.

24. (Original) The medium of Claim 22, wherein the code is further operable to:
provide a quota allocation to the end user on a per-flow basis such that the end user is given an amount of quota that may substantially satisfy a current access request being made by the end user.

25. (Original) The medium of Claim 22, wherein the code is further operable to:
redirect the communication flow associated with the end user to a webpage that is
operable to display one or more financial parameters associated with the data segment to the
end user.

26. (Canceled)

27. (Original) The medium of Claim 25, wherein the code is further operable to:
store quota data for the end user that reflects an allotment of information to be provided to the
end user.

ATTORNEY DOCKET NO.
062891.1142
Confirmation No.: 7140

PATENT APPLICATION
10/645,139

22

Appendix B: Evidence

NONE

ATTORNEY DOCKET NO.
062891.1142
Confirmation No.: 7140

PATENT APPLICATION
10/645,139

23

Appendix C: Related Proceedings

NONE